REMARKS/ARGUMENTS

Claims 1-32 are pending in this application. Claims 1, 14 and 21 have been currently amended. Claims 1, 14 and 21 are independent claims. Support for the amendment may be found throughout the specification and drawings.

Claim Rejections – 35 USC § 103(a)

Claims 1-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Colbrook et al. ("Colbrook", Algorithms For Search Trees On Message Passing-Architectures) in view of Dixon et al. ("Dixon", U.S. Patent No. 4,464,718). Applicants respectfully traverse this rejection.

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." (emphasis added) (MPEP § 2143). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. (emphasis added) *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Independent Claims 1 and 21 recite "at least one search engine" and "a plurality of search engines," respectfully. In rejecting Claim 1, the Patent Office admitted that Colbrook does "not explicitly disclose a search engine" (Office Action, page 3, line 12) and relied on Dixon for teaching "a search engine [note: search engine (controller 16) figure 1; abstract]" (Office Action, page 3, lines 13-14). Applicants respectfully disagree since controller 16 in figure 1 of Dixon is "an I/O controller" (see, e.g., Dixon, col. 4, ll. 30-40), *not* a search engine as illustrated, for example, in FIG. 2 and paragraph [0025] at page 8 of Specification of the present application. Further, Applicants have performed a diligent search and were not able to find the word "search engine" in Dixon.

Independent Claims 1, 14 and 21, as amended, each recite "a binary search tree". This is supported, for example, by paragraph [0015] at page 5 of Specification

as shown below:

> For example, a sorted <u>binary search tree</u> may be provided having a fixed number of levels, in which the bottom vertices contain keys and associated data. The hierarchy vertices or nodes may contain one key for each child vertex and a vertex address pointing to the vertex containing that key. The keys are arranged in a predetermined order, such as address order, across the vertices of each level such that a search into a given hierarchy vertex is directed into a specific group of keys. The search tree is structured so that all search paths are the same length. Nodes or vertices may be inserted and deleted at most levels, thereby maintaining the equal length to all search paths. The tree may employ perfect matching techniques which seek a perfect match between the input or query key and the key being sought. If a perfect match is not returned, the search reports a false return (emphasis added).

By contrast, Colbrook describes "a new algorithm for maintaining <u>a balanced search tree</u> on a message-passing MIMD architecture" (emphasis added) (Colbrook, Abstract). In other words, Colbrook discloses "a balanced search tree," *not* "a binary search tree." In addition, Applicants respectfully submit that "a binary search tree" is also not taught, disclosed, or suggested by Dixon.

At least based on the foregoing-described reasons, the rejections should be withdrawn, and independent Claims 1, 14 and 21 should be allowed.

Claims 2-13, 15-20 and 22-32 depend from Claims 1, 14 and 21, respectively, and should therefore be allowed due to their dependence.

CONCLUSION

In light of the foregoing, Applicants respectfully request that a timely Notice of Allowance be issued in the case.

Respectfully submitted on behalf of

LSI Logic Corporation,

Dated: September 13, 2004

By: _____

Peng Zhu

Reg. No. 48,063

SUITER • WEST PC LLO
14301 FNB Parkway, Suite 220
Omaha, NE 68154
(402) 496-0300   telephone
(402) 496-0333   facsimile